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Application by the Town Of Redwater For  
New Town Status.



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MENTS

Application by the Town of Redwater  
for New Town Status

1

Details of the Imperial Alberta  
Fertilizer Plant Complex

3

The Region

5

Land Requirements

12

Analysis

14

Engineer Consultants Report on Services

Financial Statement

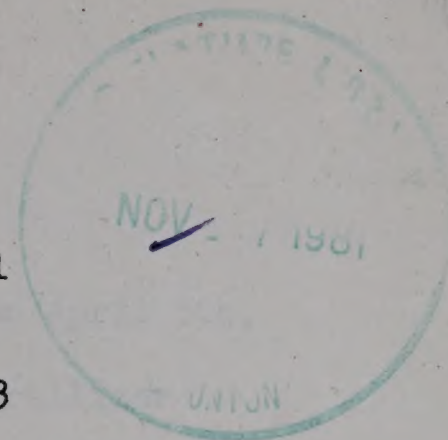
23

Synopsis

25

Appendix

1. Letters from Town of Redwater in  
support of New Town Status - date May 11th, 1967
2. Letters from Town of Redwater in  
support of New Town Status - date May 17th, 1967
3. (a) Figure 3 - Town of Redwater Town Boundaries  
(b) Figure 4 - Town of Redwater - Existing Land Use  
(c) Figure 5 - Town of Redwater - Proposed Land Use  
(d) Figure 6 - Town of Redwater - Existing Public  
and Quasi-Public Uses  
(e) Figure 7 - Town of Redwater - Existing Water and Sewer Mains



LIBRARY  
VAULT 19





## THE APPLICATION

Imperial Oil Limited officially announced on April 5th, 1967, in a press release, that the Company will build a fertilizer manufacturing complex seven miles south of the Town of Redwater. Due to the magnitude of the development and its proximity to Redwater, the Town Council, after giving serious consideration to its present financial status and the necessary expansion of utilities to accommodate the increase in population resulting from the proposed industrial complex, held a Council meeting on May 9th, 1967. A motion was passed to apply for New Town status, pursuant to the provisions of "The New Towns Act", being Chapter 39 of the Statutes of Alberta, 1956, as amended. The request was transmitted in letters dated May 11th and 17th, 1967, to the Minister of Municipal Affairs and in turn was directed to the Provincial Planning Board for consideration.

Section 4(3) of the Act sets out the terms of reference in considering such applications and the Board, prior to making a recommendation to the Lieutenant-Governor-in-Council may:

- (a) give notice of the application for a proposed New Town,
- (b) cause a public hearing to be held at which any person may make representation with regard to the proposal,





- (c) refer the application to the Local Authorities Board for a recommendation on the financial aspects of the proposal, and the Local Authorities Board may, if it deems necessary, require the applicant to file certain material and may hold a hearing thereon,
- (d) engage independent consultants or technical experts to report to them on any phase of the proposed New Town's development.

Prior to the application for New Town status, Council of the Town of Redwater resolved to have prepared a General Plan pursuant to The Planning Act, 1963, as amended, and requested the Provincial Planning Director to undertake the preparation of the General Plan. On December 2nd, 1966, the Minister of Municipal Affairs issued a Development Control Order and subsequently the Town Council enacted a Development Control By-law which came into force on January 11th, 1967.





### THE IMPERIAL ALBERTA FERTILIZER COMPLEX

The planned fertilizer manufacturing complex will be sized to produce approximately 500,000 short tons (2,000 lb. ton) per year of phosphatic and nitrogenous fertilizers. The complex will consist of two separate plants, namely a NITROGEN FERTILIZER PLANT and a PHOSPHATE FERTILIZER PLANT.

NITROGEN FERTILIZER PLANT - will produce 600 tons per day of anhydrous ammonia and 550 tons per day of prilled and coated ammonium nitrate.

The major raw materials will be natural gas received by pipeline.

PHOSPHATE FERTILIZER PLANT - will manufacture 1,100 tons per day of granular ammonium phosphate fertilizers. The major raw material will be 1,400 tons per day of phosphate rock and 380 tons per day of sulphur and anhydrous ammonia. Shipments of the raw material will be by rail and truck.

The complex will be located in the County of Thorhild, seven miles south of Redwater and adjoining the west bank of the North Saskatchewan River. The overall site area will be approximately 800 acres (Figure 1). Operating personnel for the plants will number approximately 350.

Work has commenced on the clearing and levelling of the site. The earth work is to be completed by September, 1967, after which construction of the plants will commence. At the peak of construction, in the latter half of 1968, it is anticipated that a work force of 1,100 to 1,500 persons will be employed. Completion of the





plant is schedule for the spring of 1969. No provision for a construction camp has been made nor is one contemplated on or near the plant site. Therefore, construction workers as well as permanent personnel will be required to find living accommodation in the surrounding communities.

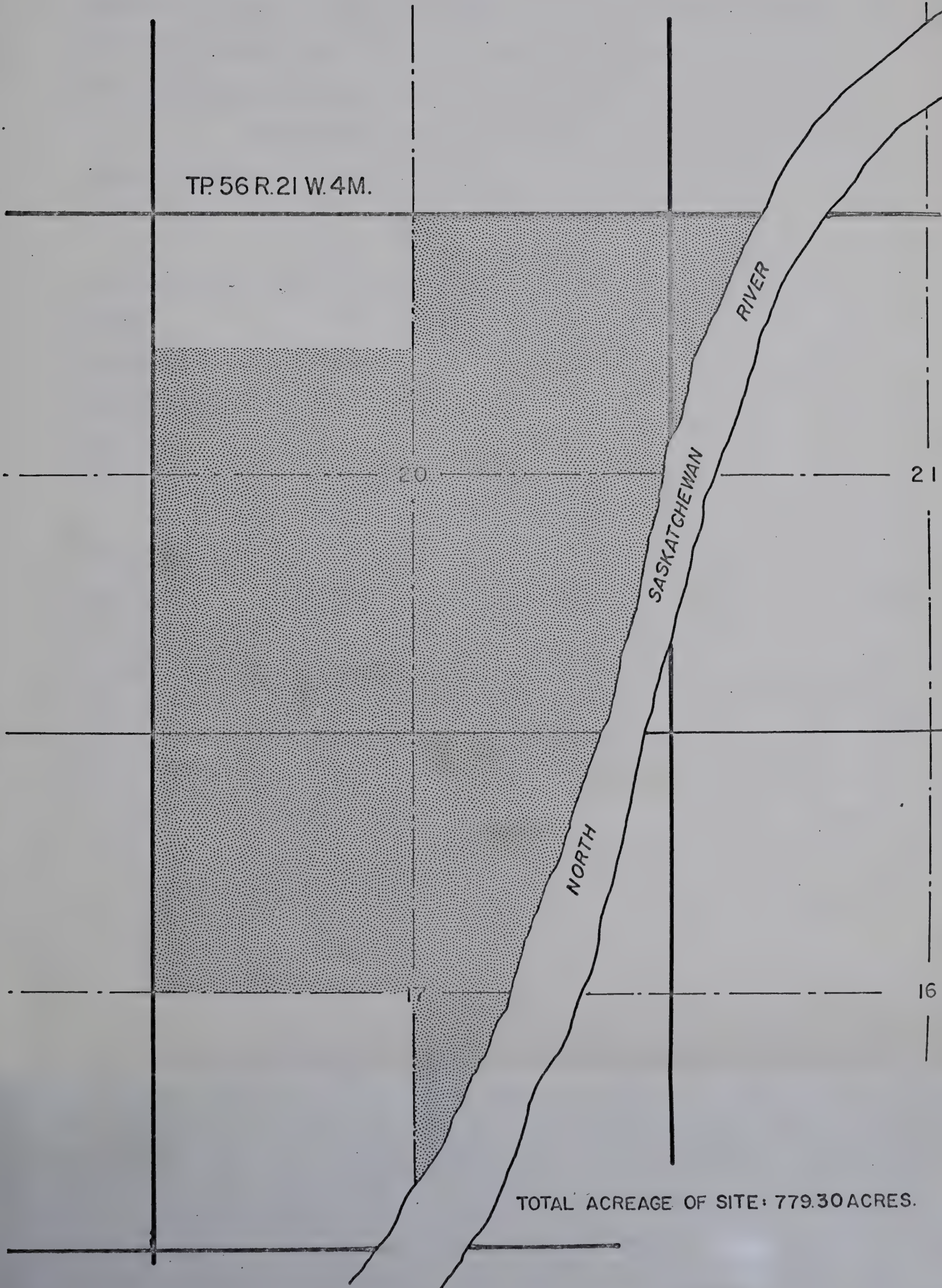




# IMPERIAL ALBERTA FERTILIZER COMPLEX SITE



TP. 56 R. 21 W. 4 M.



TOTAL ACREAGE OF SITE: 779.30 ACRES.

FIGURE: I





THE REGION

(a) The proposed fertilizer plant will be located on a site comprised of the following lands lying west and adjacent to the North Saskatchewan River, viz:- parts of Sections 17, 20 and 21, in Township 56, Range 21, West 4th Meridian (Figure 1). Existing incorporated settlements located within a radius of ten miles of the plant site are Gibbons, Bruderheim, Fort Saskatchewan and Redwater (Figure 2).

The following table indicates the present and projected population figures for each municipality.

	1966	TABLE 1 1951 - 1966 Period		Projected 1981
		Increase	Decrease	
Gibbons	230	20.00%		321
Bruderheim	290		25.00%	244
Fort Saskatchewan	4,152	286.00%		7,296
Redwater	1,041		20.00%	811

From the foregoing table it will be noted that the Village of Gibbons and the Town of Fort Saskatchewan indicate a growth in population while the Village of Bruderheim and the Town of Redwater show a decline in population for future years. With the establishment of the fertilizer plant and other industries in the area, the projected population figures will change. The effect will be more noticeable in some and less in others.





VILLAGE OF BRUDERHEIM - The present function of Bruderheim is that of a limited service centre for the surrounding agricultural district. Because of the distance and the indirect route from the proposed fertilizer plant, and the limited services available, it is unlikely that permanent employees of the plant will choose to reside at Bruderheim.

VILLAGE OF GIBBONS - Primarily a service centre for the surrounding agricultural area. The proposed fertilizer complex will be located nine miles directly east of Gibbons and will be connected by a hard surfaced road, and as in the case of Bruderheim, the services available in Gibbons are limited and also with the short travelling distance from Gibbons to Edmonton (20 miles) on a paved main highway, it is highly improbable that any great amount of permanent employees of the plant will reside at Gibbons.

TOWN OF FORT SASKATCHEWAN - Up to 1952 the Town was primarily a service centre for the surrounding agricultural area, and since then has been experiencing a steady industrial expansion in and adjacent to the Town, viz:- nickel, fertilizer, chemical and glass plants. The land within the Town boundary is fully utilized and any increase in population would result in land having to be annexed.

TOWN OF REDWATER - Originally a service centre for the agricultural area in the vicinity, but with the discovery of oil and gas in the latter part of 1948 the Town experienced a tremendous growth (in 1951 the population had increased to 1,458 from 160 people in 1948). Since this boom era there has been a gradual decline in population brought about by mechanization within the oil industry.





The location of the fertilizer plant has been governed to a considerable extent by the Federal Governments designation of this region under the Area Development Program which is aiming to improve the economic situation in the Redwater district.

In assessing the relative merits of Redwater and Fort Saskatchewan as potential growth points brought about by the proposed fertilizer plant, the ability to accommodate the required labor force residentially has a definite bearing on the final choice.

Assessment of population required to be housed:

Permanent staff	300
Maintenance, seasonal workers, etc.	50
	<u>350</u>
Service workers (2 per every 15 workers)	<u>46</u>
	396
Provincial average of 75% married workers out of total labor force	297
Assuming average family size of four persons	1,188
. . . Total new population	
	1,188 + 99
	1,287

In assessing housing needs it must be noted that there is a strong likelihood of 20-30 assistant shop foremen at present employed by Sherritt-Gordon leaving to take employment in the new plant. These workers are living in Fort Saskatchewan and no doubt will continue to do so.

Hence a fresh calculation produces the following:





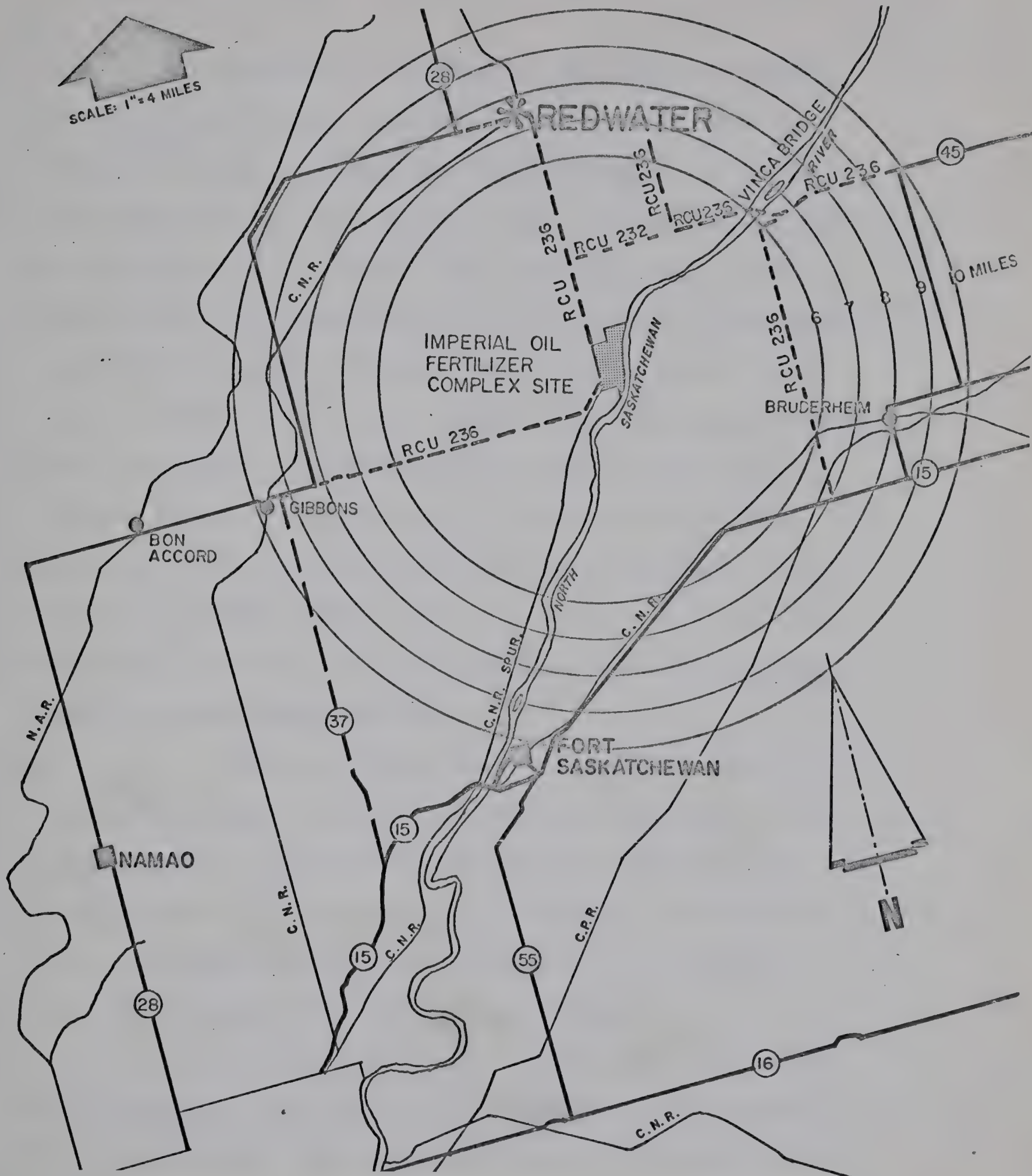
Permanent workers 300 - 30	270
Maintenance, seasonal workers, etc.	<u>50</u> 320
Service workers (2 per 15 workers)	<u>42</u>
Total	362
Married workers (75% of 362)	271
Average size family of four persons	1,084
. . . Total new population to be housed 1,084 + 91	1,175

The Town of Fort Saskatchewan envisages the provision of additional residential land to provide a total of 30 individual lots and 24 suites by 1968. The Town of Redwater on the other hand, has 127 individual lots immediately available within the Town boundary and another 48 lots north of Fourth Avenue North (outside existing Town boundary). In addition, land can be made available on the west side of First Street West and south of Third Avenue South providing a total of 30 lots. An area of 24 acres has been set aside for apartments and at a density of 26 apartments per acre a total of 216 apartments could be provided. Thus on balance the Town of Redwater is in a far better position to provide the necessary lots when required for housing the workers at the proposed fertilizer plant.





# REDWATER & ENVIRONS







(b) Arrangements are being made by Imperial Oil Limited to service their fertilizer complex with railway facilities and a network of highways, both main and secondary (Figure 2). The secondary roads from the plant site will connect with Provincial highways, numbers 15, 28, 37 and 45, thus providing a means for the transportation of raw materials to the plant and the finished products to market. The improved secondary roads will also provide first class all-weather access to the existing incorporated municipalities where the permanent employees of the plant will choose to reside. Six miles downstream from the plant, a bridge across the North Saskatchewan River is being constructed (Vinca Bridge) and will provide access to Bruderheim and to the area south of the river. Upstream from the plant, at Fort Saskatchewan, there is an existing bridge across the Saskatchewan River.

Pursuant to the secondary road system a grant of up to \$277,000 has been provided by the Provincial Government for the up-grading of the road west from the plant site connecting with highways number 28 and 37, to R.C.U. 236 standard. Reconstruction of the nine mile stretch of road has commenced. This portion is within the Municipal District of Sturgeon (Figure 2).

The road directly north from the plant site to the Town of Redwater, a distance of seven miles is to be up-graded to R.C.U. 236 standard. Since this road is not a part of the secondary road system, the construction of the road will be borne by the County of Thorhild with a possible grant from the Provincial Government. Construction of the road will not commence before 1968.





The road east from the plant to within two miles of the Vinca Bridge is to be up-graded to R.C.U. 232 standard and the two miles to the bridge and connecting with Highway No. 15 and 45 is to be up-graded to R.C.U. 236 standard (Figure 2).

The Canadian National Railway will build a spur line from their main line at Fort Saskatchewan to the fertilizer plant. The spur line will parallel the Saskatchewan River and the right-of-way has been established.

The road east from the plant and the road south and east from the bridge is part of the Secondary Road System.

Also to be taken into consideration are additional employees who will be employed in other industries locating in the Redwater area. Presently an engineering consulting firm is planning an industrial estate located a half mile south of the Town of Redwater and in connection with the estate the firm have requested the Town to provide forty residential lots to accommodate employees. Negotiations are presently in progress for one industry to establish there shortly. Information on the type and magnitude is not available while negotiations are in progress.

NOTE: R.C.U. 232 denotes Rural Collector Undivided - 2 lanes  
32 foot subgrade with 28 foot pavement.

R.C.U. 236 denotes Rural Collector Undivided - 2 lanes  
36 foot subgrade with 32 foot pavement.



(c) The municipalities of Fort Saskatchewan, Redwater and Gibbons are or will experience some difficulty in obtaining an additional supply of potable water to meet the demand due to the increase in population which will result from industries locating in the area. This is also applicable to the industries themselves. As a result, the Council's of the Village of Gibbons, Towns of Fort Saskatchewan and Redwater, Counties of Strathcona and Thorhild and Municipal District of Sturgeon have had a preliminary study made of the water problem by the firm of Associated Engineering Services Limited.





The foregoing evidence indicates the Town of Redwater should be selected as the community to be expanded, to accommodate the employees of the proposed fertilizer plant and such other industries as might locate in the vicinity.

LAND REQUIREMENTS (up to 1981)

Projected new population of Redwater is as follows:

1971	2,908
1976	3,561
1981	4,292

For a town with a population of 4,292, acreages of major land uses have been calculated as follows:

(a) Residential

For 3,734 persons at 16 persons per acre (net) based on 4 houses per acre (net) and 4 persons per house = 233 acres

(b) High Density Residential

For 558 persons at 50 persons per acre based on 2.5 persons per suite and 20 suites per acre (net) = 11 acres

(c) Commercial - High Density

Based on a standard of 3.1 acres per 1,000 and an average of 63.7 lineal feet per 100 population (Bartholomew)

= 13 acres

(d) Industrial

Based on a standard of 5.7 acres per 1,000 population (Bartholomew)

= 25 acres





(e) Educational

Approximately 30% of the population will be of school age. Therefore, schools for 1,287 pupils are required. Present pupil population is 507, thus accommodation for 787 pupils is required. The existing schools can accommodate an increase in school population (Grades 1 to 12) amounting to 233 at this point in time, leaving new accommodation to be provided for 554 pupils. Distribution of pupils into various grades would be as follows:

Grade	Percentage	No. of Pupils	Existing Pupils	Pupils to be in new premises
Elementary	60%	775	381	394
Junior High	24%	306	193	112
Senior High	16%	206	180	26
	100%	1,287	754	532

The School Board state that land requirements are assessed at 5 acres for the first 100 pupils and 1 acre for each subsequent 100. Approximately 25% will be in Separate Schools and 75% in Public Schools. Thus total acreage required - 17 acres

Separate Schools                      4.25 acres

Public Schools                        12.75 acres

(f) Parks, Playgrounds and Other Public Uses

Based on National Recreational Association standard of  
10 acres for 1,000 population = 22.5 acres - 90.20



ANALYSIS

Land requirements based on  
future population (1981)

- |                                 |           |
|---------------------------------|-----------|
| 1. (a) Residential              | 233 acres |
| (b) High Density<br>Residential | 11 acres  |

- |                               |          |
|-------------------------------|----------|
| 2. Commercial<br>High Density | 13 acres |
| 3. Industrial                 | 25 acres |

Land allocation - Proposed Land Use Map

- |                    |
|--------------------|
| 1. (a) 67.58 acres |
| (b) 10.56 acres    |

The possibility of utilizing the present golf course for residential purposes has been suggested to the Redwater Town Council on the understanding that an equivalent area be provided in lieu. This would be a gain of 71.8 acres for residential purposes. Land to the north and west immediately outside the Town boundary amounting to 480 acres would eventually be allocated for residential use.

- |  |
|--|
| 2. 14.85 acres   |
| 2. (a) Commercial low density 9.13 acres   |
| 3. 94.21 acres - The majority uses are for warehousing and storage allied to the oil industry - hence the need for a comparatively large area. |





4. Educational 17 acres

4. 12.79 acres - The County School Superintendent has suggested that should high school enrollment increase, a new high school in Redwater would be possible - recommended area of 20 acres.

5. Parks, Playgrounds  
and Public 22.5 acres

5. 90.20 acres which includes a golf course of 71.8 acres









